

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/013513 A1

(51) International Patent Classification⁷: **H04B 7/26**

(21) International Application Number:
PCT/KR2004/001928

(22) International Filing Date: 30 July 2004 (30.07.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2003-0053226 31 July 2003 (31.07.2003) KR

(71) Applicant (for all designated States except US): **SK TELECOM CO., LTD.** [KR/KR]; 99, Seorin-dong, Jongro-gu, Seoul 110-110 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **IHM, Jongtae** [KR/KR]; 304-502 Dongsin Apt., Imae-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-797 (KR). **LEE, Jaemoon** [KR/KR]; 247-104 Jugong2-danji, Jamsil-dong, Songpa-gu, Seoul 138-912 (KR). **YANG, Hojin** [KR/KR]; 125-405 Daewoo-3cha Apt., Janggok-dong, Siheung-si, Gyeonggi-do 429-732 (KR). **CHOI, Jintae** [KR/KR]; 54-226 Heukseok 3-dong, Dongjak-gu, Seoul 156-859 (KR). **JO, Sungho** [KR/KR]; 116-1106 Suseo Apt., 711,

Irwon-dong, Gangnam-gu, Seoul 135-230 (KR). **HAN, Sangjin** [KR/KR]; 105-804 Indukwon Samsung Apt., Gwanyang 2-dong, Dongan-gu, Anyang-si, Gyeonggi-do 431-717 (KR).

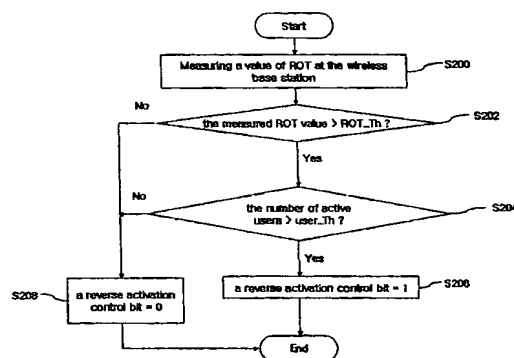
(74) Agents: **LEE, Chulhee** et al.; 14F, Hyundai Marine & Fire Insurance Bldg., 646, Yeoksam-dong, Gangnam-gu, Seoul 135-080 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR CONTROLLING REVERSE LINK RATE IN CDMA 1XEV-DO MOBILE COMMUNICATION SYSTEM



(57) Abstract: A method and a system for controlling a reverse link rate in a CDMA mobile communication system is provided. A method for controlling a reverse link rate by using the number of active users who are carrying out communication in a CDMA 1xEV-DO mobile communication system, comprising the steps of: (a) measuring a value of rise-over-thermal (ROT) at each antenna end of a wireless base station to obtain a measured ROT value; (b) comparing the measured ROT value with a threshold ROT which defines an allowable limit of the ROT; (c) setting a reverse activation control bit as 0 to be transmitted to a mobile terminal if the comparison result in step (b) reveals that the measured ROT value is smaller than or equal to the threshold ROT; (d) comparing the number of the active users with a threshold user number which defines an allowable limit of the active users if the comparison result in step (b) reveals that the measured ROT value is greater than the threshold ROT; (e) setting the reverse activation control bit as 0 to be transmitted to the mobile terminal if the comparison result in step (d) reveals that the number of the active users is smaller than or equal to the threshold user number; and (f) setting the reverse activation control bit set as 1 to be transmitted to the mobile terminal if the comparison result in step (d) reveals that the number of the active users is greater than the threshold user number.



WO 2005/013513 A1



Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.